Claims

1. (currently amended) In a computer system, a method of displaying high dynamic range digital images on a display, the method comprising:

receiving high dynamic range image information, wherein the high dynamic range image information defines a high dynamic range image;

receiving region of interest information, the region of interest information defining one or more regions of the high dynamic range image;

displaying a derived image comprising:

a background image constructed from the high dynamic range image information; and

~~, along with~~ one or more portions of the high dynamic range image corresponding to the one or more regions, the one or more portions of the high dynamic range image displayed in accordance with at least one display parameter that differs from a corresponding display parameter for the background image.

2. (original) The method of claim 1 wherein the received region of interest information is generated by a user via a graphical user interface.

3. (original) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the background image is determined by a user.

4. (original) The method of claim 1 wherein the high dynamic range image information consists of information stored in a single image file.

5. (original) The method of claim 1 wherein the high dynamic range image information comprises plural images.

6. (original) The method of claim 5 wherein each of the plural images have a narrower dynamic range than the high dynamic range image.

7. (original) The method of claim 5 wherein each of the plural images have differing dynamic ranges.

8. (original) The method of claim 1 wherein the displaying comprises performing a geometric transform of the background image, along with one or more portions of the high dynamic range image corresponding to the one or more regions.

9. (original) The method of claim 1 wherein the displaying comprises performing a geometric transform of the one or more portions of the high dynamic range image corresponding to the one or more regions.

10. (currently amended) The method of claim 1 wherein the ~~displaying comprises blending the~~ background image is blended in the derived image with the one or more portions of the high dynamic range image corresponding to the one or more regions.

11. (original) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the background image is a tone mapping parameter.

12. (original) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the background image is a cached image parameter.

13. (original) The method of claim 1 wherein the at least one display parameter that differs from the corresponding display parameter for the background image is adjustable in real time.

14. (original) The method of claim 1 further comprising repeating the acts of claim 1 for a plurality of different high dynamic range images.

15. (original) A computer-readable medium having stored thereon computer-executable instructions for causing a computer to perform the method of claim 1.

16.-36. (canceled)

37. (currently amended) A computer system comprising:

a processor; and

a storage having stored therein computer-executable instructions to implement a high dynamic range image viewer operable to output to a display one or more derived high dynamic range images ~~based on~~ each comprising a background image and one or more selected regions of interest, wherein a display parameter for the background image differs from a corresponding display parameter for the one or more selected regions of interest ~~in the one or more high dynamic range images~~.

38. (original) The computer system of claim 37 further comprising an image output device for visually displaying digital images.

39. (original) The computer system of claim 37 wherein the high dynamic range image viewer comprises a derived image constructing module.

40. (original) The computer system of claim 37 wherein the high dynamic range image viewer comprises a graphical user interface module.

41. (original) The computer system of claim 37 wherein the high dynamic range image viewer comprises an image pre-processor for creating one or more intermediate images based on the input high dynamic range image information.

42. (original) The computer system of claim 37 further comprising a cached image storage for storing cached images.

43. (canceled)

44. (currently amended) A computer ~~readable medium having computer executable code for implementing a software system for displaying high dynamic range digital images on a display, the software~~ system comprising:

means for processing ~~receiving~~ high dynamic range image information, wherein the high dynamic range image information defines a high dynamic range image;

means for processing ~~receiving~~ region of interest information, the region of interest information defining one or more regions of the high dynamic range image;

means for causing a computer to display an image comprising:

a background image constructed from the high dynamic range image information; and

~~, along with~~ one or more portions of the high dynamic range image corresponding to the one or more regions, the one or more portions of the high dynamic range image displayed in accordance with at least one display parameter that differs from a corresponding display parameter for the background image.

45. (currently amended) In a computer system, a method of displaying high dynamic range digital images during image editing, the method comprising:

receiving high dynamic range image information, wherein the high dynamic range image information defines a high dynamic range image;

receiving region of interest information generated by a user, the region of interest information defining one or more user-selected regions of the high dynamic range image;

displaying one or more images, each of the one or more displayed images comprising:

a background image constructed from the high dynamic range image information, along with one or more portions of the high dynamic range image corresponding to the one or more user-selected regions, wherein the one or more portions are displayed with a tone mapping parameter that differs from a corresponding parameter for the background image to facilitate application of tone mapping to the high dynamic range image during image editing.